WHAT IS CLAIMED IS:

- A method of treating cancer in a mammal comprising administering to a mammal in need thereof an amount of a mimetic of an enzymatic scavenger of reactive oxygen species sufficient to effect said treatment.
- 2. The method according to claim 1 wherein said mimetic is a mimetic of superoxide dismutase (SOD), catalase or peroxidase.
- 3. The method according to claim 2 wherein said mimetic is a mimetic of SOD.
- 4. The method according to claim 1 wherein said mimetic is a methine substituted porphine or substituted tetrapyrrole, or pharmaceutically acceptable salt thereof.
- 5. The method according to claim 1 wherein said mimetic is bound to a metal.
- 6. The method according to claim 5 wherein said metal is selected from the group consisting of manganese, iron, cobalt, copper, nickel and zinc.
 - 7. The method according to claim 6 wherein said metal is manganese.
- 8. The method according to claim 7 wherein said mimetic is a manganese bound methine substituted porphine.

- 9. The method according to claim 8 wherein said mimetic is 10110, 10111, 10112, 10113, 10123, 10143, 10150, 10151, 10153, 10158 and 10201.
- 10. The method according to claim 2 wherein said mimetic is of the formula

or pharmaceutically acceptable salt thereof.

wherein

R₁ and R₃ are the same and are:

R, and R, are the same and are:

Y is halogen or -CO₂X, and

X is the same or different and is an alkyl and each R₅ is the same or different and is H or alkyl, and is optionally complexed with a metal selected from the group consisting of manganese, iron, cobalt, copper, nickel and zinc.

- 11. A method of protecting normal tissue of a mammal from the toxic effects associated with gene therapy, immunotherapy, radiotherapy or chemotherapy comprising administering to a mammal in need thereof an amount of a mimetic of an enzymatic scavenger of reactive oxygen species sufficient to effect said treatment.
- 12. The method according to claim 11 wherein said mimetic is a mimetic of superoxide dismutase (SOD), catalase or peroxidase.

- 13. The method according to claim 12 wherein said mimetic is a mimetic of SOD.
- 14. The method according to claim 11 wherein said mimetic is a methine substituted porphine or substituted tetrapyrrole, or pharmaceutically acceptable salt thereof.
- The method according to claim 11 wherein said mimetic is bound to a metal.
- 16. The method according to claim 15 wherein said metal is selected from the group consisting of manganese, iron, cobalt, copper, nickel and zinc.
 - 17. The method according to claim 16 wherein said metal is manganese.
- 18. The method according to claim 17 wherein said mimetic is a manganese bound methine substituted porphine.
- 19. The method according to claim 18 wherein said mimetic is 10110, 10111, 10112, 10113, 10123, 10143, 10150, 10151, 10153, 10158 and 10201.
- 20. A method of preventing cancer or preventing the recurrence of cancer in a mammal comprising administering to a mammal in need thereof an amount of a mimetic of an enzymatic scavenger of reactive oxygen species sufficient to effect said treatment.

- 21. The method according to claim 20 wherein said mimetic is a mimetic of superoxide dismutase (SOD), catalase or peroxidase.
- 22. The method according to claim 21 wherein said mimetic is a mimetic of SOD.
- 23. The method according to claim 20 wherein said mimetic is a methine substituted porphine or substituted tetrapyrrole, or pharmaceutically acceptable salt thereof.
- 24. The method according to claim 20 wherein said mimetic is bound to a metal.
- 25. The method according to claim 24 wherein said metal is selected from the group consisting of manganese, iron, cobalt, copper, nickel and zinc.
 - 26. The method according to claim 25 wherein said metal is manganese.
- 27. The method according to claim 26 wherein said mimetic is a manganese bound methine substituted porphine.
- 28. The method according to claim 27 wherein said mimetic is 10110, 10111, 10112, 10113, 10123, 10143, 10150, 10151, 10153, 10158 and 10201.